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# An Overview of Cloud Computing

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**Abstract:-** *Cloud computing provides on demand services to its client. Data storage is among one in every of the first services provided by cloud computing. Cloud service hosts the knowledge of data owner on their server and user can access their data from these services. As data owners and servers are different identities, the paradigm of the knowledge is correctly hosted in to the cloud storage server. During this paper discuss the varied techniques that are used for secure data storage on cloud. The different visions of cloud computing is to access traditional supercomputing and also high performing computing power, these are usually performed by different military and also different research facilities they usually use it to perform tens of trillion of different computations per second in different oriented application for example financial portfolios, to deliver various personalized information, to provide users data storage and to power large immersive computer game.*

**Keywords:** Cloud Computing, cloud storage, deployment models.

## I. INTRODUCTION

Cloud computing is something like that the combo of the varied previously existing technology that have increased at the different rates and also it shows increase in the different numerous context. The vision that cloud computing has that it helps the users to take the advantages as much as they want in today's technology. In today world many organizations have gotten into cloud computing because it helps the user to store their data in very easy manner and they can access it easily when the user want . The major barrier that occurs in cloud computing is security and privacy i.e; preserving integrity and available data.

Cloud computing could ever be a normal term of love or money which involves in different delivering hosted service on over the web. Cloud services are divide into major three types. Infrastructure-as-a-service(IaaS), platform-as-a-service(PaaS) and the last one is Software-as-a-service(SaaS). This cloud computing name came into notice by a cloud symbol which is often accustomed which can reflect the web in flowchart as well as diagram methods.

**History of cloud computing:**
Cloud computing has evolved through a number of stages that include grid and utility computing, application service provision and the very known software as a service (SaaS), but this concept of delivering computing resources through a global network is developed in the 1960s.

The idea of an "intergalactic computer network" was introduced in the 1960s by JCR Licklider, who enabled the development of the Advanced Research Projects Agency Network (ARPANET) in 1969. The word cloud was used as a metaphor for the web and a daily cloud-like shape was accustomed denote a network on telephony schematics.

**Deployment model:**
Cloud computing deployment models shows availability of cloud services to users. The deployment models related to cloud are as follows:

PUBLIC CLOUD: like its name,this type of deployment model helps all users who all want to make use of a computing resourse for example hardware (OS,CPU) and software (application server database) based on subscription. These are most commonly used in application development and testing.

PRIVATE CLOUD: like its name, a PRIVATE CLOUD is typically infrastructure used by single organization. This type of infrastructure are managed by organization itself to provide help to the various user group or it could be managed by service providers that usually take care of it either on site or off site.

They are quiet expensive in comparison to public cloud.

HYBRID CLOUD: In this an organization makes use of interconnected private and public cloud infrastructure. Different organizations use this model when they need to grow there IT infrastructure rapidly, such as leveraging public clouds to supplement the capacity which are available within private cloud.

**Cloud Storage:**
It's one the first functions that defines the cloud computing. Cloud computing is defined because the web free spaces where a user can store his/her information and might easily access it anywhere.

There are 4 main sorts of cloud storage:-

PERSONAL CLOUD STORAGE: Also knows as mobile cloud storage. In this type data of a non- public is stored and it becomes for the user to access it easily anywhere.

PUBLIC CLOUD STORAGE: this type of cloud Manages and store the knowledge of a particular enterprise's.

PRIVATE CLOUD STORAGE: privately Cloud Storage the enterprises and cloud storage providers are integrated within the enterprises data centre. Privately cloud storage is the storage data centre that's typically managed by the storage provider.

HYBRID CLOUD STORAGE: it's a mix of public and personal cloud storage where some critical data resides within the enterprisers private cloud while other data is stored and accessible from a public cloud storage provider.

## II. CHARACTERISTICS

The primary characteristic is On-Demand Self- Service where a consumer of services is provided the needed resources without human intervention and interaction.

Second Characteristic is broad network access which suggests a user can access to his/her resources easily from anywhere at any time.

Third Characteristic is Resource Pooling which suggests that the resources are pooled so as for multitenants to share the resources.
Peak-load capacity increases (users needn't engineer and acquire the resources and equipment to satisfy their highest possible load-levels).

Utilization and efficiency improvements for systems that are often only 10–20% utilized.

## III.SECURITY AND PRIVATY ISSUES IN DATA STORAGE

Cloud computing mainly involves in internet hosting in comparison to a local services which are easily accessible around location and devices. It is a system where most of the businesses and people work from more than one computing device. Cloud can be referred to the applications and the services which are delivered through internet and also to the software and hardware that make suitable these services.

CONFIDENTIALITY: Major foremost dispute in cloud is data confidential services which mean accessing different data only the real users and is very strongly related with the various authenticating problem that in cases of faux Access to the knowledge.
INTEGRITY: Another major dispute that's faced by the Cloud computing is Integrity Of the knowledge which suggests that cloud computing ensures the knowledge of a particular user should be the identical and no change within the knowledge should be expected by any reasonably unauthorized ways and hackings.

AVAILABILITY: The aim of the cloud computing is to supply quick access to the user so as that a non-public can access to the knowledge from anywhere which could be a challenge for the cloud computing.

## IV. ADVANTAGES OF CLOUD COMPUTING

LESS COST
The foremost good thing about cloud computing is that it finally ends up in an exceedingly vast reduction in costs. This reduction is from a decrease in operating and maintenance costs. You simply purchase capacity after you'd prefer it.
Further, installing a server for you company can cost quite little bit of money, to not mention maintaining it and fixing it when it goes down. Instead, utilize the cloud and another company's servers. This protects costs on hiring more IT staff and equipment.

ACCESSIBILITY & EFFICIENCY
Another benefit is that the accessibility of the cloud. As long as you have got a web connection you may be able to access your data from anywhere.

CLOUD COMPUTING IN AN EXCEEDINGLY MULTICHANNEL RETAIL ENVIRONMENT
Finally, cloud computing in an exceedingly multichannel retail environment can help your company simplify data integration between different systems from eCommerce, Point of Sale, Accounting, ERP and Inventory.

A cloud-based solution integrating these systems together enables companies to maximize the use of the systems they already own, improve data visibility, and streamline operations. With multiple channels, data from multiple locations becomes a hassle and manually entering data between systems becomes arduous and inefficient. Cloud computing allows companies to syndicate items faster, centralize order management and customer data, and synchronize inventory.

The end result's a more streamlined operation saving companies money, time and headaches.

ENHANCED COLLABORATION
Cloud applications enhance collaboration by authorizing diverse groups of people virtually meet and exchange information with the help of shared storage. These capabilities help in improving the customer service and development of products.

CONTROL ON THE DOCUMENTS
Before cloud came into being, workers needed to send files in and out as the email attachments for being worked on by a single user at one time ultimately ending up with a mess of contrary titles, formats, and file content. Moving to cloud computing has facilitated central file storage.

## V. CONCLUSION

The main conclusion of the cloud computing is that it's really helpful to the user to access the knowledge and is factual growing during this present as more and more companies became into the Cloud Computing due to the demand of the users to store their data online the only real threat that's faced by the cloud computing is security threats that's confidentiality of the knowledge Integrity of the knowledge Availability of the knowledge Therefore it's advices to the those who are using cloud computing to not store any highly confidential data in their cloud.

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